

Aug 25, 2023

Comment on Proposed Restriction of PFAS

Japan Valve Manufacturers' Association (JVMA)

Japan Valve Manufacturers Association (JVMA) appreciates the opportunity to provide comments to the PFAS restriction proposal.

1. Introduction

JVMA was established in 1954 and has been a representative association of Japanese valve industry for nearly seventy years. As of today, we are comprised of 115 major domestic valve manufacturers including several Japanese subsidiaries of European valve makers and additional 68 associate companies. Since our establishment, we have implemented various effective programs to contribute to society, occasionally cooperating with some of Central Government Ministries and Agencies. Especially we are pouring the biggest effort to resolve environmental problems, so the Environmental Committee and four working groups in our organization are working on the following issues:

- Greenhouse gas reduction.
- Design for the environment of valves.
- Life cycle assessment of valves.
- Gathering information on restricted substances.
- Environmental education.

To response to the PFAS restriction proposal, we have prepared a technical and socioeconomic statement which is attached document.

2. Comment

The technical functions provided by PTFE and PFA are persistence and lubricity. Persistence and lubricity are required for valves in the following categories. PTFE and/or PFA are selectively used in the following categories of valves:

- Sterilization of steam/pharmaceutical tanks in the pharmaceutical, chemical, food, electrical equipment, metal, steel, rubber, glass, textile, petroleum, paper, household equipment, laundry categories, sterilization of food production lines, various raw materials and reactors heating, hot water production, and valve gaskets and packing used for safety valves for boilers.

- Sterilization of steam/pharmaceutical tanks in the pharmaceutical, chemical, food, electrical equipment, metal, steel, rubber, glass, textile, petroleum, paper, household equipment, laundry categories, sterilization of food production lines, various raw materials and reactors valve seat rings used for heating water, producing hot water, and safety valves for boilers.

- Sterilization of steam/pharmaceutical tanks in the pharmaceutical, chemical, food, electrical equipment, metal, steel, rubber, glass, textile, petroleum, paper, household equipment, laundry categories, sterilization of food production lines, various raw materials and reactors heating, hot water production, and safety valves for boilers.

- Manufacturing of pharmaceuticals, chemicals, food, electrical equipment, metals, steel, rubber, glass, textiles, petroleum, paper manufacturing, housing equipment, laundry category for water/liquid, housing, water lines for facilities such as factories, chemical plants, etc. Gaskets and packings for valves used in lines.

- Manufacturing of pharmaceuticals, chemicals, food, electrical equipment, metals, steel, rubber, glass, textiles, petroleum, paper manufacturing, housing equipment, laundry category for water/liquid, housing, water lines for facilities such as factories, chemical plants, etc. Discs of valves used in lines.

- Disc seats and ball seats of valves used for seals, sliding parts, and shaft seals of fluid control equipment in the energy category.

- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the energy category.

- Valve packing and shaft seal used for the sliding part shaft seal of the fluid control mechanism in the energy category.

- Gaskets, packings, gland seals, shaft seals, soft seats (disc seats) used in energy category cold evaporator valves.

- Gaskets, packings, gland seals, shaft seals, soft seats (disc seats) used for process piping valves in the energy category.

- Backup rings used for cold evaporator valves in the energy category.

- Backup rings used for process piping valves in the energy category
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- Diaphragms used in cold evaporator valves in the energy category
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- Diaphragms used in valves for process piping in the energy category.
- Bearings, bushes, and guides used in energy category cold evaporator valves.
- Bearings, bushes, and guides used in valves for process piping in the energy category.
- Gaskets used for cold evaporator valves in the energy category.
- Gaskets used for process piping valves in the energy category.
- Disc seats and ball seats of valves used for sealing parts, sliding parts, and shaft seals of fluid control equipment in the chemical industry category.
- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the chemical industry category.
- Valve packings and shaft seals used for sliding part shaft seals of fluid control mechanisms in the chemical industry category.
- Ball valve seats, packings, and gaskets for valves used in chemical manufacturing process liquid lines in the chemical industry category.
- Ball valve seats, packings, and gaskets for valves used in chemical lines of electrolysis equipment in the chemical industry category.
- Ball valve seats, packings, and gaskets for valves used in chemical filling lines for chemicals in the chemical industry category.
- Ball valve seats for valves used in chemical manufacturing process liquid lines in the chemical industry category.

- Gaskets, packings, and gland packings for valves used for fluid control in thermal, nuclear, hydraulic, geothermal, steel mills, ships, and petrochemical power generation equipment.
- Valve packing and shaft seal used for sliding part shaft seal of fluid control mechanism in water supply equipment category.
- Disc seats and ball seats of valves used for seals, sliding parts, and shaft seals of fluid control equipment in the construction product category.
- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the construction product category.
- Valve packings and shaft seals used for sliding part shaft seals of fluid control mechanisms in the construction product category.
- Grease for valves used for fluid control of air conditioning fluids in the construction product category.
- Disc seats and ball seats of valves used for seals, sliding parts, and shaft seals of fluid control equipment in the petroleum and mining industries.
- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the petroleum and mining industries.
- Valve packing and shaft seal used for the sliding part shaft seal of the fluid control mechanism in the petroleum and mining industries.
- Grease for valves used for fluid control in petrochemical and chemical category petrochemical plants and chemical plants.
- Scraper rings for valves used for fluid control in petrochemical and chemical category petrochemical plants and chemical plants.
- Disc seats and ball seats of valves used for seals, sliding parts, and shaft seals of electronic and semiconductor category fluid control equipment.

- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the electronics and semiconductor categories.
- Valve packing and shaft seal used for the sliding part shaft seal of the fluid control mechanism in the electronics and semiconductor categories.
- Disc seats and ball seats of valves used for seals, sliding parts, and shaft seals of fluid control equipment in the transportation category.
- Valve bearings, O-rings, guides, thrust washers used for sliding part shaft seals of fluid control mechanisms in the transportation category.
- Valve packing and shaft seal used for the sliding part shaft seal of the fluid control mechanism in the transportation category.
- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used for cold evaporator valves in the transportation category.
- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used for process piping valves in the transport category.
- Back-up rings used for cold evaporator valves in the transportation category.
- Back-up rings used for process piping valves in the transportation category.
- Diaphragms used in valves for cold evaporators in the transportation category.
- Diaphragms used in valves for process piping in the transportation category.
- Bearings, bushes and guides for cold evaporator valves in the transportation category.
- Bearings, bushes and guides used in valves for process piping in the transport category.
- Gaskets used for cold evaporator valves in the transportation category.
- Gaskets used for process piping valves in the transport category.

- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used in medical category cold evaporator valves.

- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used in process piping valves in the medical category.

- Backup rings used for cold evaporator valves in the medical category.

- Backup rings used for process piping valves in the medical category.

- Diaphragms used in valves for cold evaporators in the medical category.

- Diaphragms used in valves for process piping in the medical category.

- Bearings, bushes, and guides used in medical category cold evaporator valves.

- Bearings, bushes, and guides used in valves for process piping in the medical category.

- Gaskets used for cold evaporator valves in the medical category.

- Gaskets used for process piping valves in the medical category.

- Disc seats and ball seats of valves used for sealing parts, sliding parts, and shaft seals of fluid control equipment in the medical equipment category.

- Valve bearings, O-rings, guides, and thrust washers used for sliding part shaft seals of fluid control mechanisms in the medical equipment category.

- Valve packings and shaft seals used for sliding part shaft seals of fluid control mechanisms in the medical equipment category.

- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used for cold evaporator valves in the aerospace category.

- Gaskets, packings, land seals, shaft seals, soft seats (disc seats) used in valves for process

pipng in the aerospace category.

- Back-up rings used for cold evaporator valves in the aerospace category.
- Back-up rings used for process piping valves in the aerospace category.
- Diaphragms used in valves for cold evaporators in the aerospace category.
- Diaphragms used in valves for process piping in the aerospace category.
- Bearings, bushes, and guides used in valves for cold evaporators in the aerospace category.
- Bearings, bushes and guides used in process piping valves in the aerospace category.
- Gaskets used for cold evaporator valves in the aerospace category.
- Gaskets used in valves for process piping in the aerospace category.
- Bearings and thrust washers for valves used to control fluids used in petrochemical plants in the petrochemical category.
- Ball valve seats for valves used for transfer and storage of electronic material process liquids and refined chemical liquids in the semiconductor and electronics categories.
- Solid lubrication of sliding parts of valves in the semiconductor manufacturing category.

No polymer has the persistent and lubricious properties offered by PTFE and PFA. We may be able to develop alternatives, but we cannot prepare everything in a short period of time. For that reason, we require valves to comply with the conditions of restriction “until 13.5 years after EiF”.

It is desirable that the conditions of restriction corresponding to the multiple Uses described in this comment be clarified in the opinion of SEAC.